MAGICARD www.magicard.com

Enduro™

User Manual

Magicard Enduro single sided colour ID Card Printer - 3633-0001
Magicard Enduro Duo double sided colour ID Card Printer - 3633-0021

holo patch Standard | holo Kote Standard | Full Bleed Standard | Duplex printing Option | Mag stripe Option

ISO 9001:1992 certified
14001:2006 certified

CE UL

Issue 1

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2007

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SAFETY INSTRUCTIONS

To prevent electric shock do not remove covers.
Do not attempt to service the printer yourself.
There are no user serviceable parts inside. In the event of malfunction, refer servicing to your nearest MAGICARD® Service Centre.
Use only a power source within the limits marked on the bottom panel.
Take care not to spill any liquid on the printer.
Ensure that the power supply cord is not longer than 2 metres in length and includes a properly grounded connection.

If using this printer in Germany:

To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16 Amp circuit breaker.

Bei Anschluß des Druckers an die Stromversorgung muß sichergestellt werden, daß die Gebäudeinstallation mit einem 16 A-Überstromschalter abgesichert ist.

When handling the printer avoid touching the thermal printing edge of the thermal print head. Any grease and contamination will shorten its life.

Before transporting the printer, remove the dye film & card hoppers and pack the printer in its original packaging.

PRINTER INSTALLATION

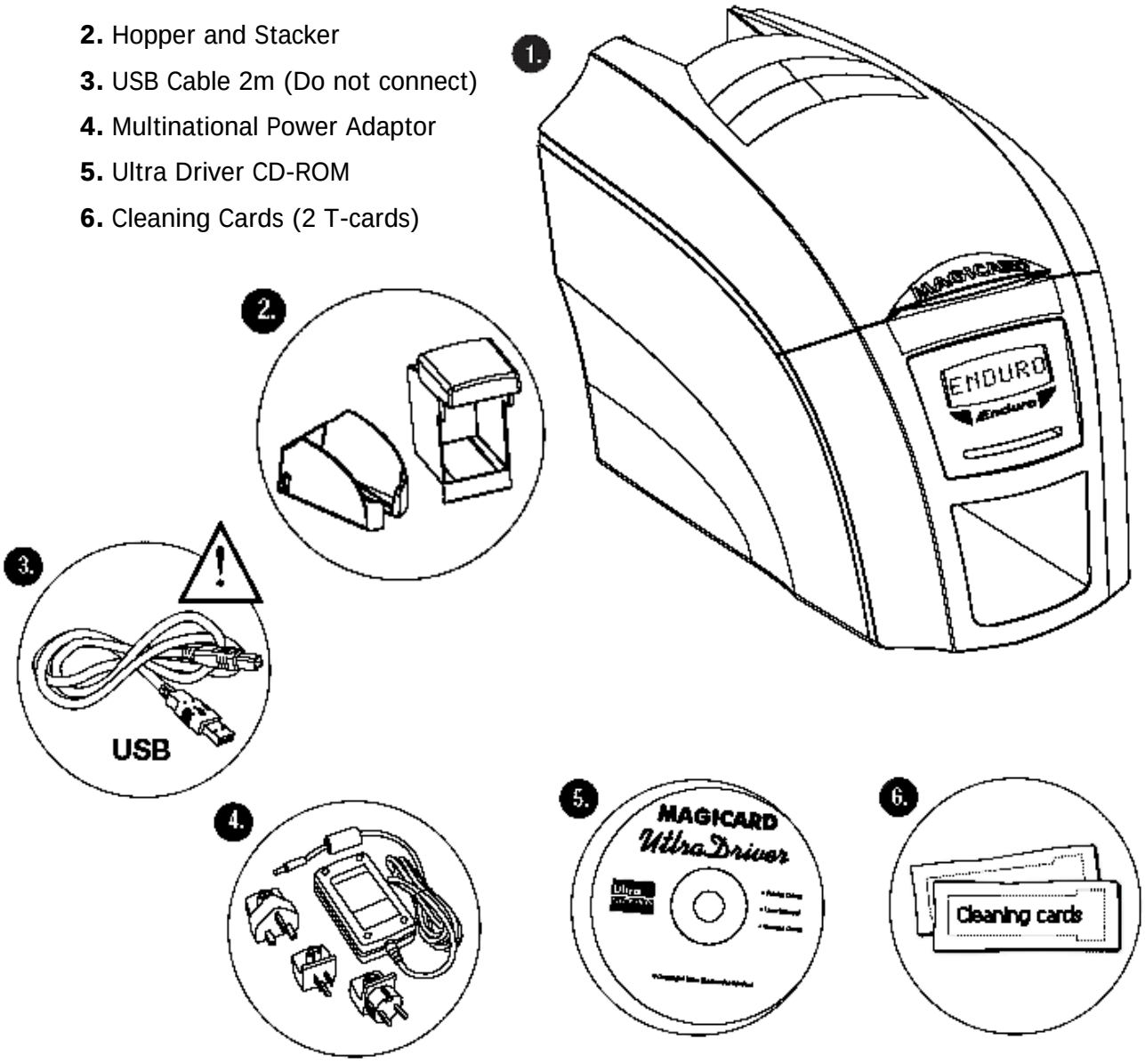
Welcome to Magicard

Thank you for choosing the Magicard Enduro printer as your secure ID card printer.
Before setting up your Enduro printer using the Ultra Driver CD–ROM, please follow the simple steps in this guide on installing your printer. This guide helps you make your printing experience more enjoyable and secure.

Unpacking

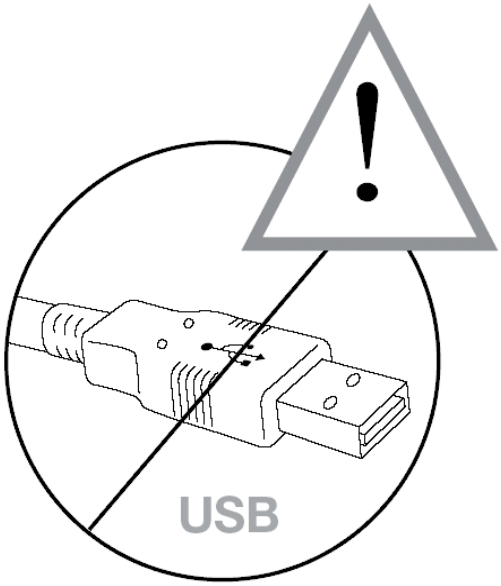
Please ensure you have all the items listed before you start installation.

1. Enduro Printer
2. Hopper and Stacker
3. USB Cable 2m (Do not connect)
4. Multinational Power Adaptor
5. Ultra Driver CD-ROM
6. Cleaning Cards (2 T-cards)



IMPORTANT

Do not connect to USB yet.

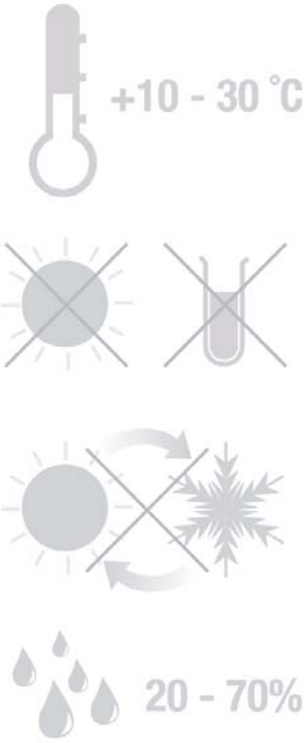


It is important to install the Ultra driver CDROM first, before connecting the USB cable between your PC and Enduro printer.

Printer Location Requirements:

Normal office environment with:

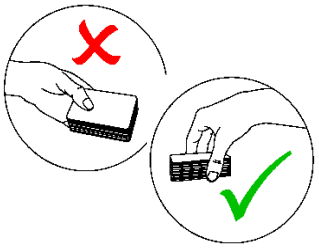
- A properly grounded power supply
- Ambient temperature +10 to 30OC (50 to 86OF)
- Protection from direct sunlight and chemicals
- Protection from abrupt temperature changes
- Relative humidity 20 - 70%
- Sufficient space for:
  - opening the top cover
  - cable access at the rear

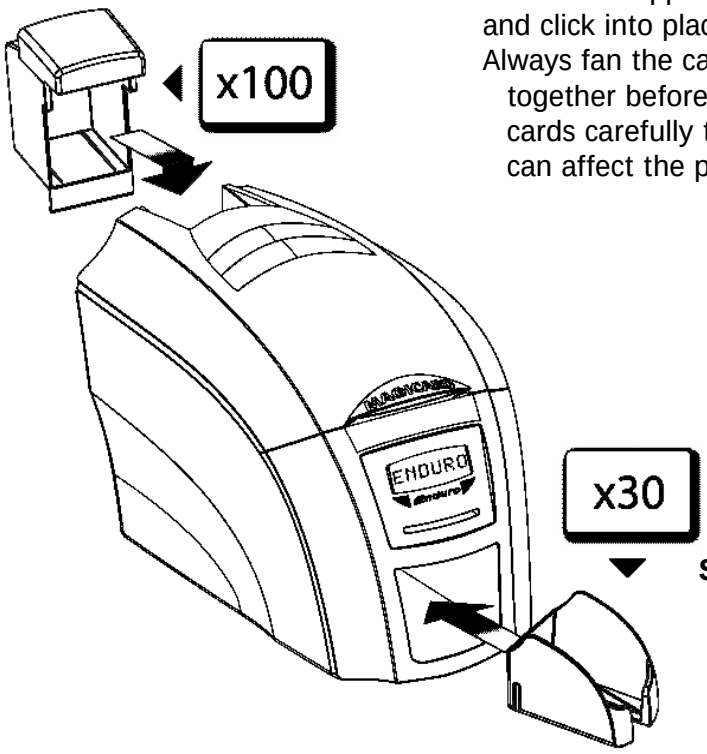


Hopper & Stacker

HOPPER: Insert the hopper into the aperture at the back of the printer and click into place.

Always fan the cards to ensure the cards are not sticking together before inserting into the hopper, and handle the cards carefully to keep the surfaces clean, as finger marks can affect the print quality.





STACKER: Insert the stacker into the aperture in the front panel and click into place. The stacker can hold up to 30, 20 to 40mil (xxmm to xxmm) thick cards. The printer can be operated without the stacker.

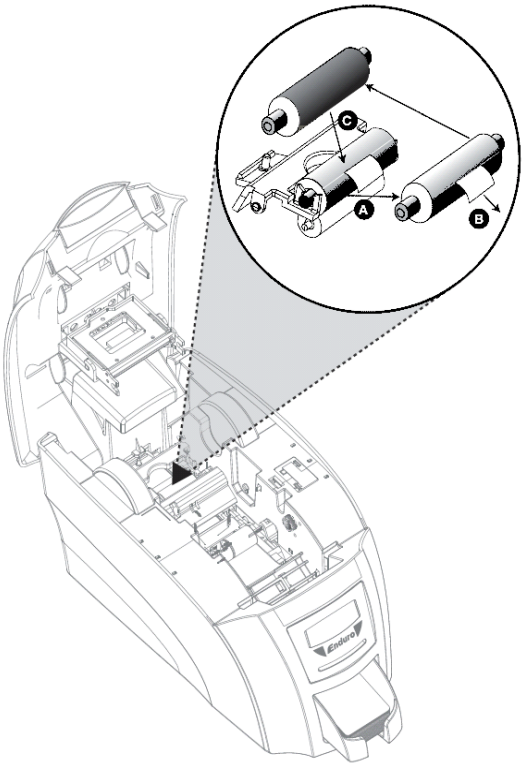
Prepare the cleaning roller

Open printer, then:

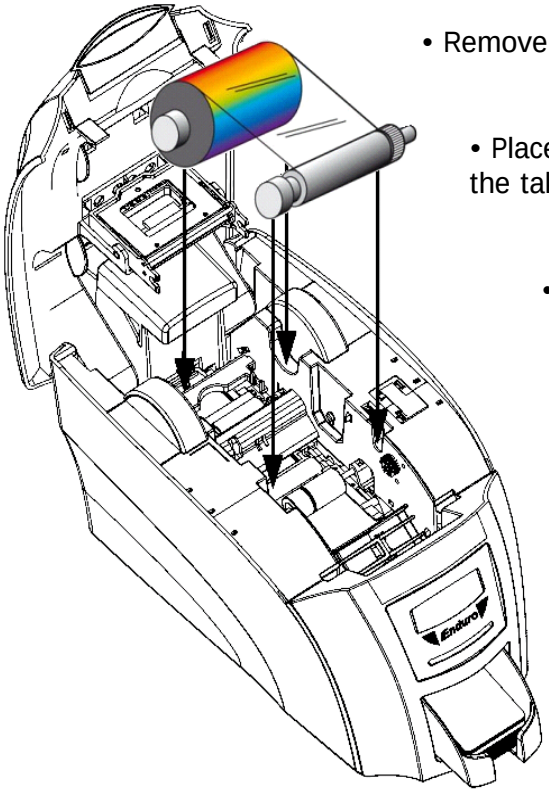
A. Pull out the unused cleaning roller.

B. Peel off white protective layer carefully to reveal tacky surface.

C. Place cleaning roller back into printer.



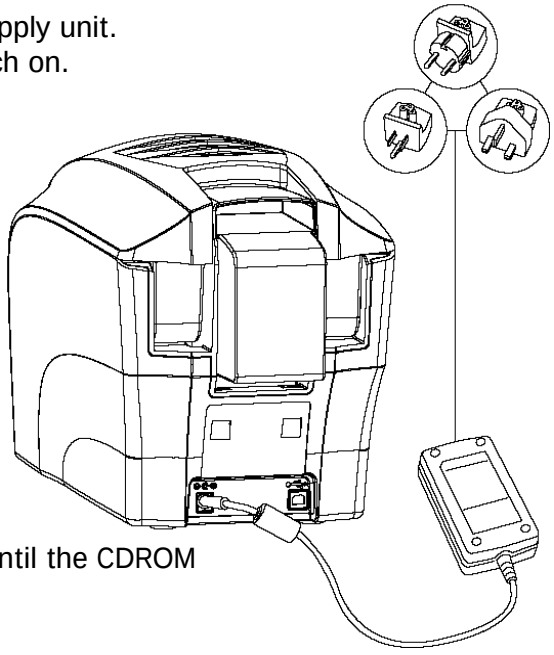
Install the dye film



- Remove dye film packaging.
- Place the loaded spool into the rear slots and the take-up spool into the front slots.
- Close the printer.

Plug power cable into the printer

Select the adapter for your region and connect to power supply unit.
Plug in and connect to printer which will automatically switch on.
Display should show the model and “Soft button” options.



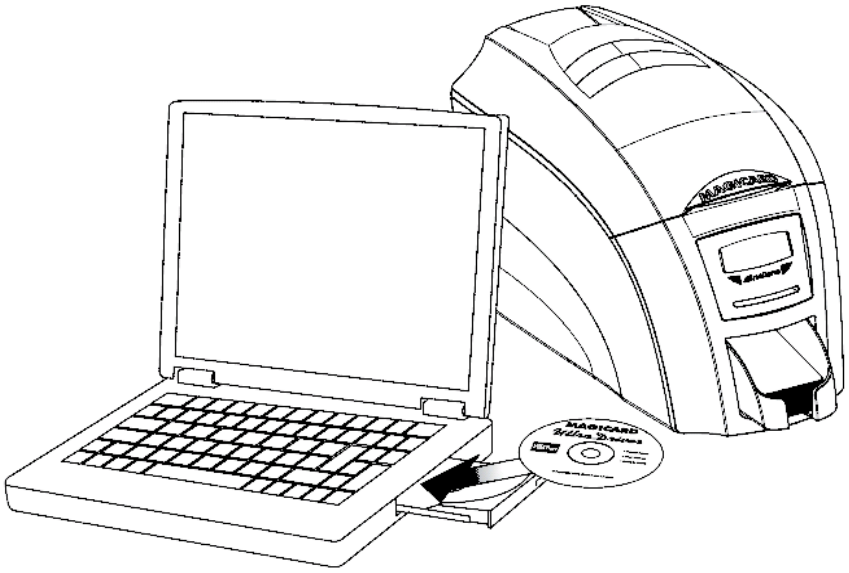
IMPORTANT: Please do not connect the USB until the CDROM has been installed.

Load the Driver CD in to your PC

1. Load the driver CD ROM into the PC.

Note : If the CD does not run automatically, click the start button, then click on “run”. Type “D:\autorun”, where D is the drive letter for your CD drive, then press the return key.

2. Now follow the on screen instructions to install the printer driver.



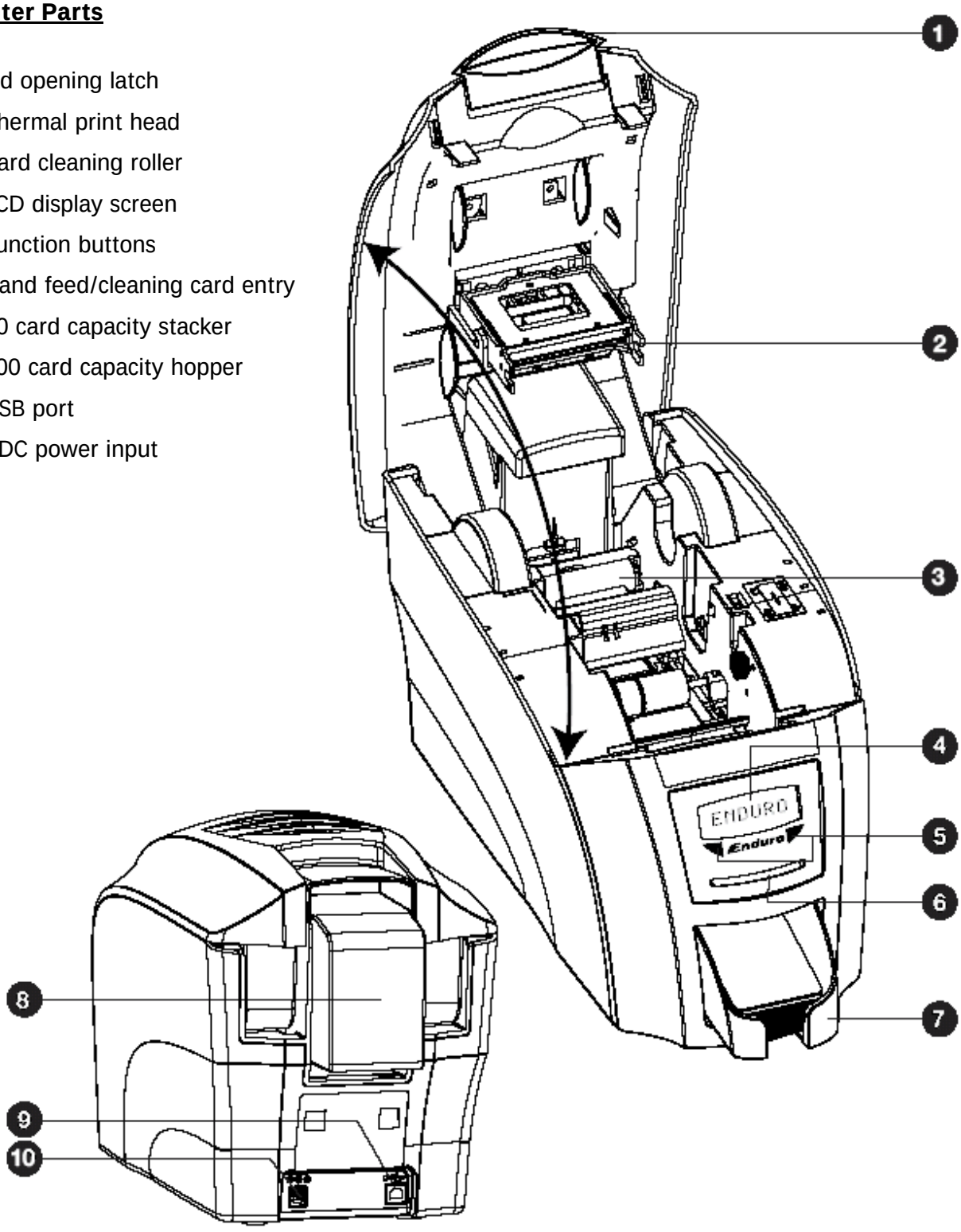
3. On completion of installation, connect your Enduro printer to the PC with the USB cable.

Now your Enduro is ready to print.

USING YOUR ENDURO PRINTER

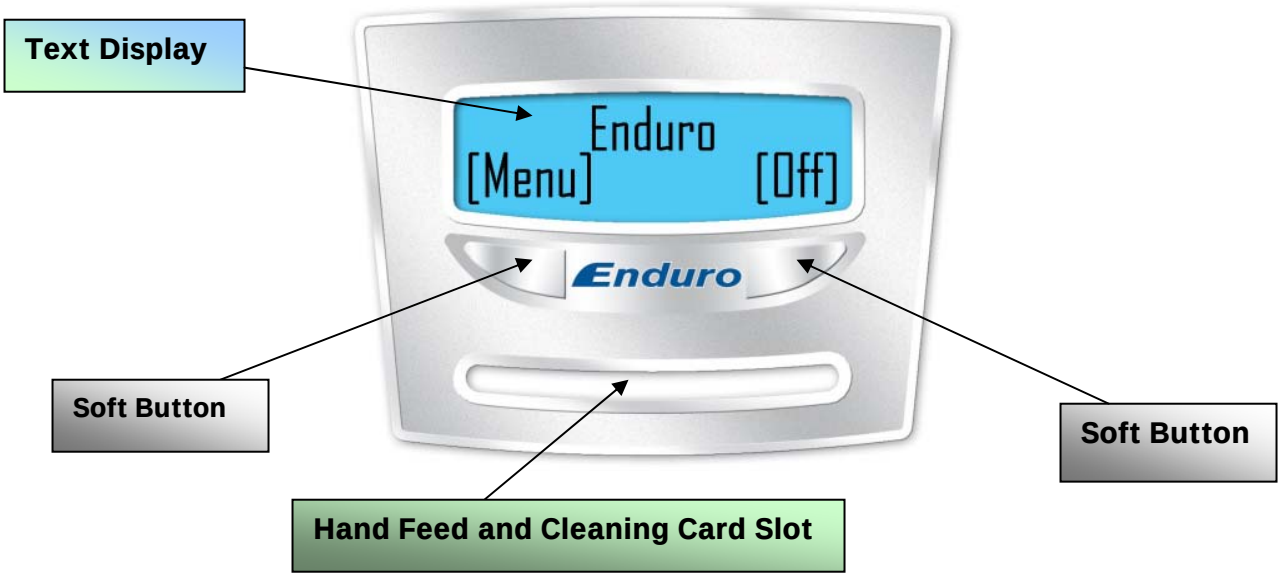
Printer Parts

1. Lid opening latch
2. Thermal print head
3. Card cleaning roller
4. LCD display screen
5. Function buttons
6. Hand feed/cleaning card entry
7. 30 card capacity stacker
8. 100 card capacity hopper
9. USB port
10. DC power input



Front Display Panel

The Enduro front panel has a text display and 2 push buttons. These buttons act as 'soft' buttons – i.e. their function varies depending on the text displayed in the square brackets ([_ _ _ _]) immediately above each button.

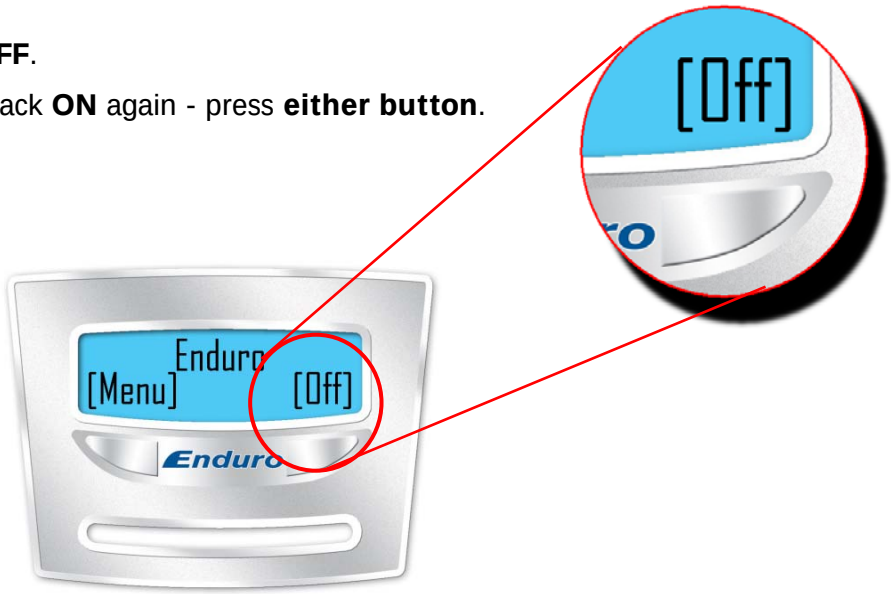


The menu options for the soft buttons are explained in the following pages .....

Off button

Switches the printer **OFF**.

To switch the printer back **ON** again - press **either button**.

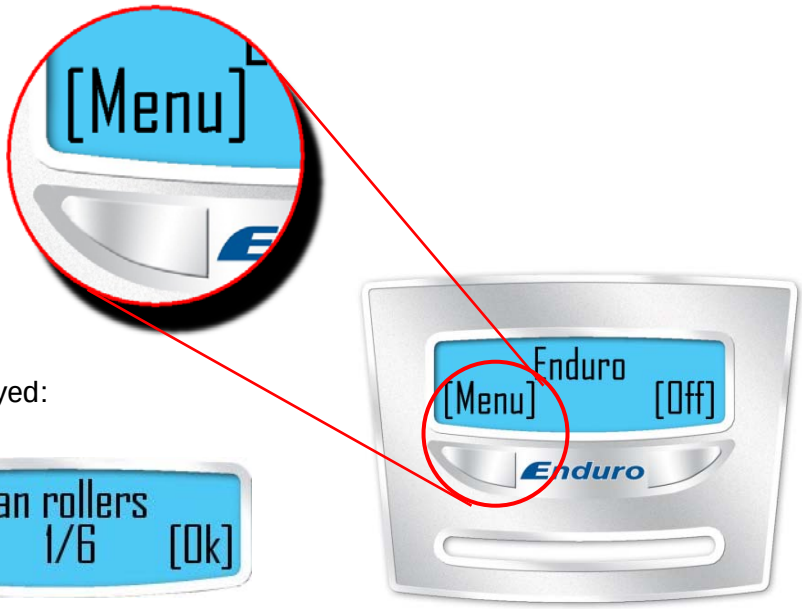


Menu options

Press the 'Menu' button .....

The first menu option will be displayed.

Press the 'Next' button to step through each option in the menu...



The following menu options will be displayed:

1 of 6 – Clean rollers

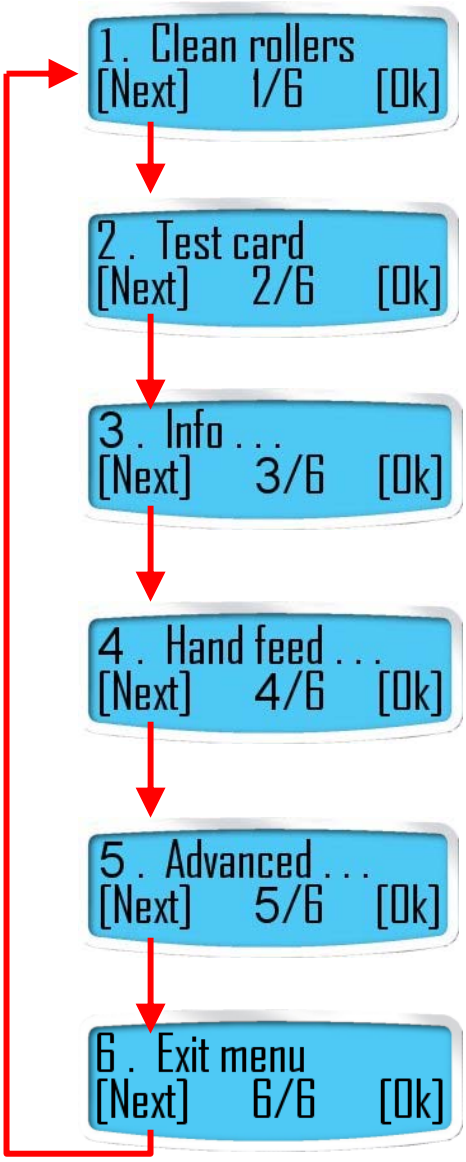
2 of 6 – Test card

3 of 6 – Info ....

4 of 6 – Hand Feed ...

5 of 6 – Advanced ...

6 of 6 – Exit Menu



Options 1 to 5 are explained below:

IMPORTANT: To prevent the cards slipping on the rollers during printing, we recommend that you clean your printer using a cleaning card **each time you replace the dye-film**.

For detailed instructions on how to clean your printer please turn to pages xx to xx

Select **[Ok]** on this option to if you wish to verify the operation of the printer.

You will be asked to confirm that you wish to print a test card.

If you select **[Yes]**, the printer will feed a card from the hopper and print an internally generated test image on it.

This option provides you with information about the printer:-

- The type of dye film fitted & how much has been used.
- The firmware version loaded in the printer.
- The total number of cards printed.
- The printer's serial number.

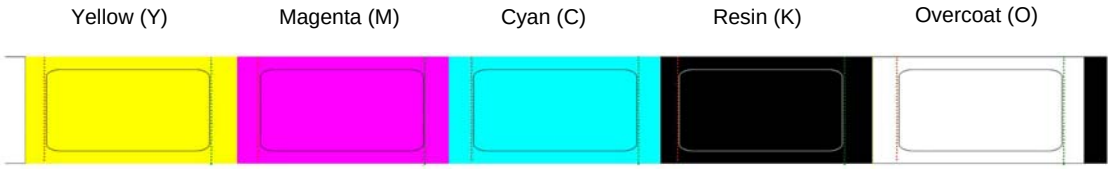
Dye-Film Options

- MA300YMCKO dye-film is the appropriate choice for colour printing with both Enduro and Enduro Duo printers.
- MA250YMCKOK dye-film, for the Enduro Duo models only, is more economic when printing in colour on the front side and black on the rear.
- MA1000K & MA600KO dye-film – where cost is critical, monochrome printing is a fraction of the cost of colour printing.

The table below is a guide to selecting the best dye-film to use for any intended application

Full color cards or monochrome	Cards Per ribbon	Ribbon Panel layout	Part Number
Full Colour	300 one side only or 150 both sides	YMCKO	MA300YMCKO
Monochrome: Black Red Blue Green Gold Silver White Scratch	1000 one side only or 500 both sides	K	MA1000K n (n = colour)
Black & Overcoat	600 one side only or 300 both sides	KO	MA600KO
Colour front & Black back	250 front & back	YMCKOK	MA250YMCKOK
Colour front & colour back	150 Front & Back	YMCKO	MA300YMCKO

Dye-film layout colour key:-

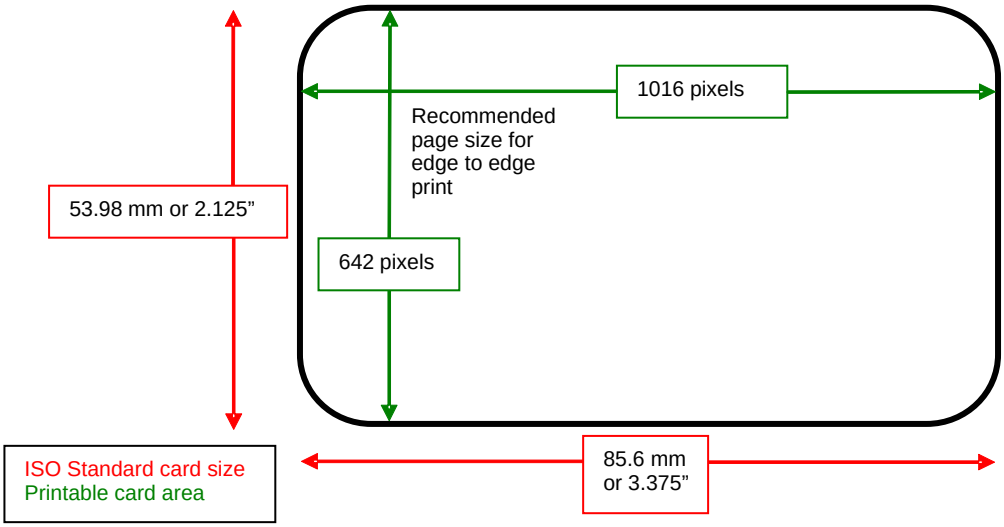


CARDS

Card Material

Not all white plastic cards are the same. For best image quality always use high quality grade PVC cards.
Pure PVC card stock or laminated PVC/polyester cards are available. The latter are more durable and better suited to heavy use and heat lamination when required. For access control and smart card applications, your Dealer should provide the appropriate type for “direct to card” printing. For good consistent results, stick to a single variety of good quality cards, such as those available from your Magicard Dealer.

Card Size



Card Thickness

Minimum	0.51mm	0.020”
Standard	0.76mm	0.030”
Maximum	1.02mm	0.040”

To obtain good quality prints the cards must be:

- Glossy white.
- Free from dirt or grease.
- Free from surface contamination, e.g. finger marks.
- Free from burrs at the edge of the card.
- Free from pits or bumps in the surface.

Printable Area of the card.

Both the Enduro and Enduro Duo printer offer high quality edge to edge (full bleed) printing.
Thus the surface of the card may be printed edge to edge.
Dye cut PVC cards typically have an edge roll off (bevel) which can result in a fine white line around the edge of full bleed printed cards. When setting up your card design using your graphics software on your PC, you should use a maximum page size of 1026 pixels (3.45”/87.5mm) x 642 pixels (2.13”/54mm).

Other Card Types.

Self-Adhesive Cards.

We recommend only self adhesive cards supplied by Ultra Electronics via your Magicard dealership. There are many different types of self-adhesive cards. Thorough investigation and testing has shown that poorer quality or incorrect card types will cause problems in the printer. These problems range from poor image quality, failure to feed from the card hopper and dye-film being cut through to cards getting jammed in the roller mechanism.

Contact Chip Cards.

Smart cards must conform to the ISO 7816 specification, with the chip contacts being below the surface of the card. It is unwise to print graphics or text directly adjacent to the chip as image quality may be affected.

Contactless (Proximity) Chip Cards.

Proximity cards must be completely flat with no sign of the chip or antenna being visible in the surface of the card.

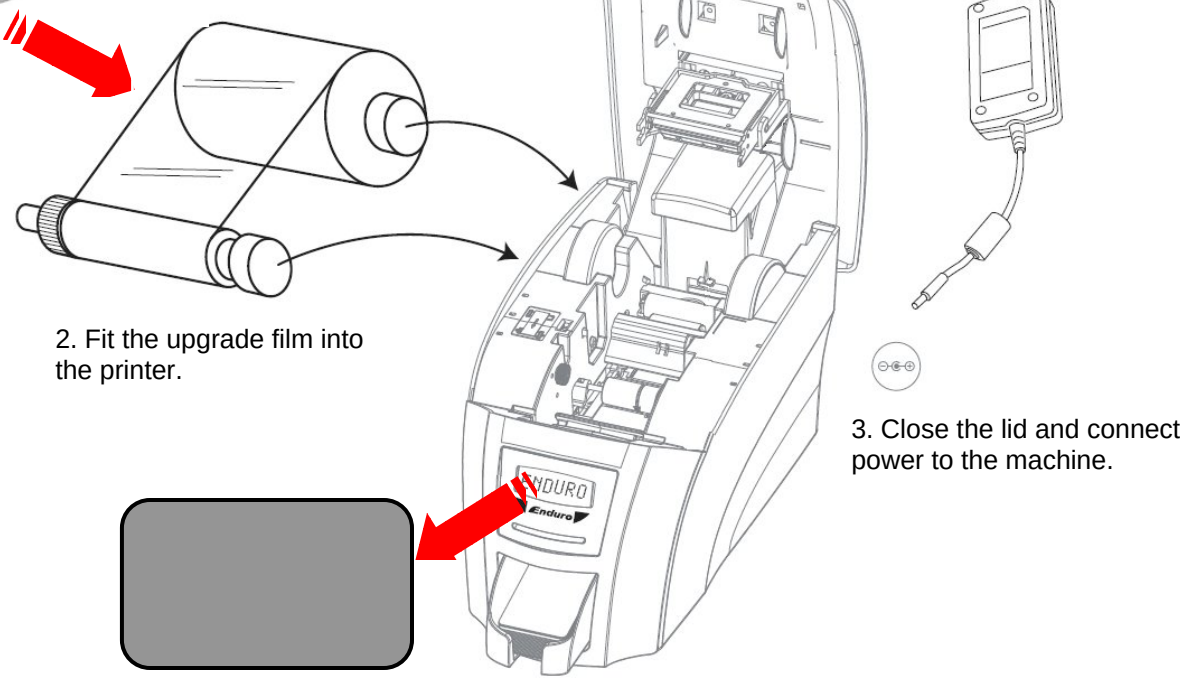
SECTION 5 SINGLE / DOUBLE-SIDED UPGRADE.

The Magicard Enduro printer can be purchased in single (Enduro) or double-sided (Enduro Duo) format.

If you choose the Enduro model you can purchase an upgrade from Magicard. This will change the Enduro to and Enduro Duo in the convenience of your office allowing you to print double-sided.

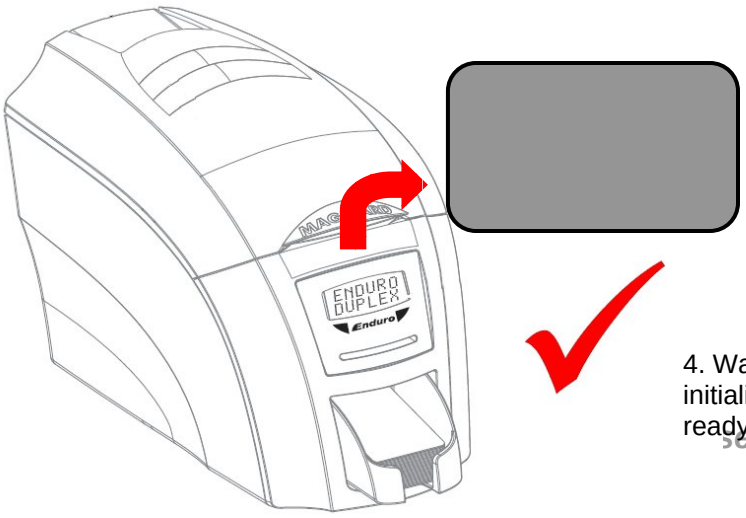
No tools are required for this upgrade. Simply drop the dye film upgrade into the machine.

1. Purchase the upgrade kit from Magicard Sales.



2. Fit the upgrade film into the printer.

3. Close the lid and connect power to the machine.



4. Wait for the printer to finish initialising and you are now ready to print.

SECTION 7 CLEANING THE PRINTER.

SECTION 7.1 CLEANING IS IMPORTANT

The most important thing you can do to ensure card print quality and the ongoing reliable operation of your printer is to perform regular cleaning cycles to remove dust and debris from the print rollers.

Plastic cards attract dust. Dust then gets 'printed' into the card surface causing unsightly blemishes and possible damage to the print head.

Your Magicard printer has built-in cleaning rollers to remove dust from the card stock. These rollers need to be cleaned periodically to remove the dust and debris accumulations.

Cleaning is Easy and Inexpensive

If you have not already done so, order a cleaning kit – see the 'Cleaning Supplies' box on the next page.

A clean printer produces better quality cards, as dust and dirt are not present when the card is being printed.

A clean printer is much less likely to require factory maintenance, and the print head in your printer will last for many years of normal use. Remember, large particles of dirt can damage the print head.

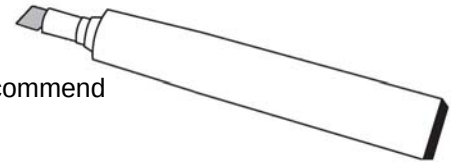
Magnetic encoding suffers when rollers are not clean.

The Magicard Cleaning System

There are three main steps to your printer's cleaning system - a Cleaning Card, a Cleaning Rolle

- A Cleaning Card is used to remove dirt from the print path. This should be used after every 350 prints (every time you replace your ribbon). If you print only a few cards a day, we recommend that you clean the printer more often.

- There is a disposable Cleaning Roller in the printer, which should be replaced after every 1000 prints (roughly after using 3 rolls of ribbon).



- There is also a Cleaning Pen, which is used to clean the print head. We recommend you use this if any lines or discolorations are seen on printed cards.

Follow the instruction on the next page for how to clean the printer.

SECTION 7.2 CLEANING SUPPLIES

Three cleaning cards and a cleaning roller are bundled with each new Enduro and Enduro printer. You can purchase additional cleaning kits, which include cleaning cards, rollers and pens.

Cleaning Kits for Europe, Middle East, Africa & Asia:

- Part # - 10 cleaning cards, 5 rollers and a cleaning pen.

Cleaning Kits for North and South America

- Part # Medium - 10 cleaning cards, 3 rollers, and 2 cleaning pens.

SECTION 7.3 CLEANING THE PRINTER ROLLERS

Step 1: Using the Cleaning Card.

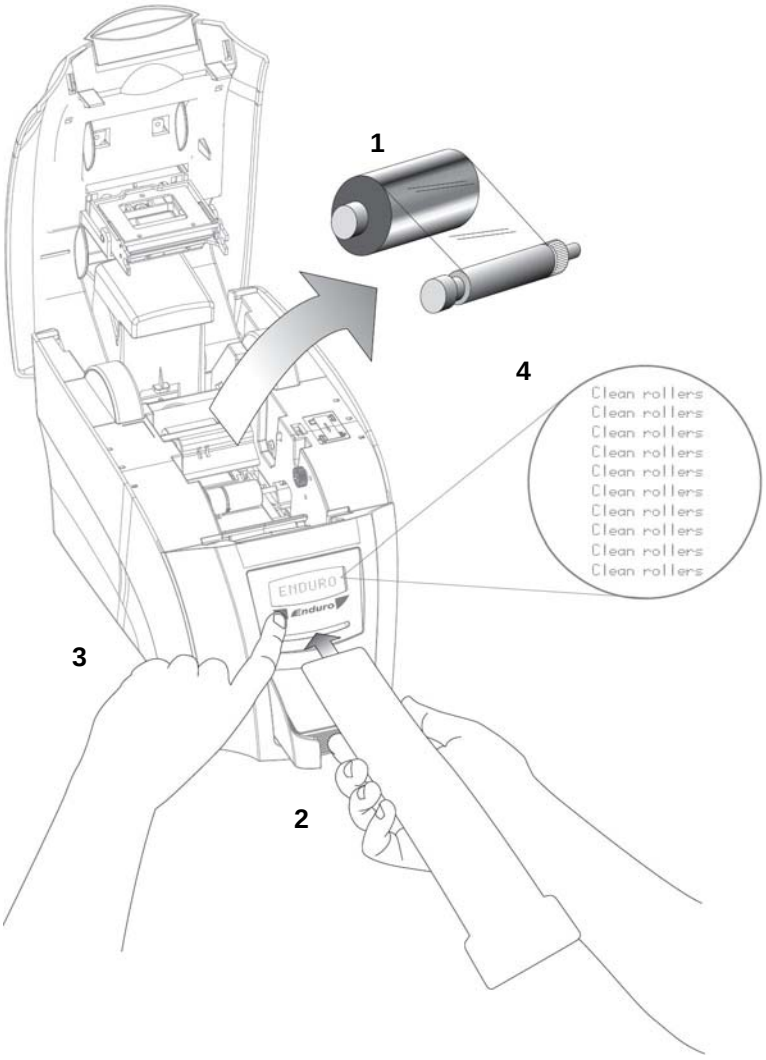
We recommend that you clean your printer using a cleaning card after every 300 prints or each time you replace the dye-film. You should do this more often if you print only a few cards a day.

1. Open the lid and remove the dye film, leave the lid open.

2. Take a new cleaning card from its packet and insert it into the front card feed slot.

3. Press the left button once to display the cleaning mode.

4. Press the right button once. The card will automatically be taken. When the cleaning cycle has finished repeat the same process using the other side of the cleaning card.

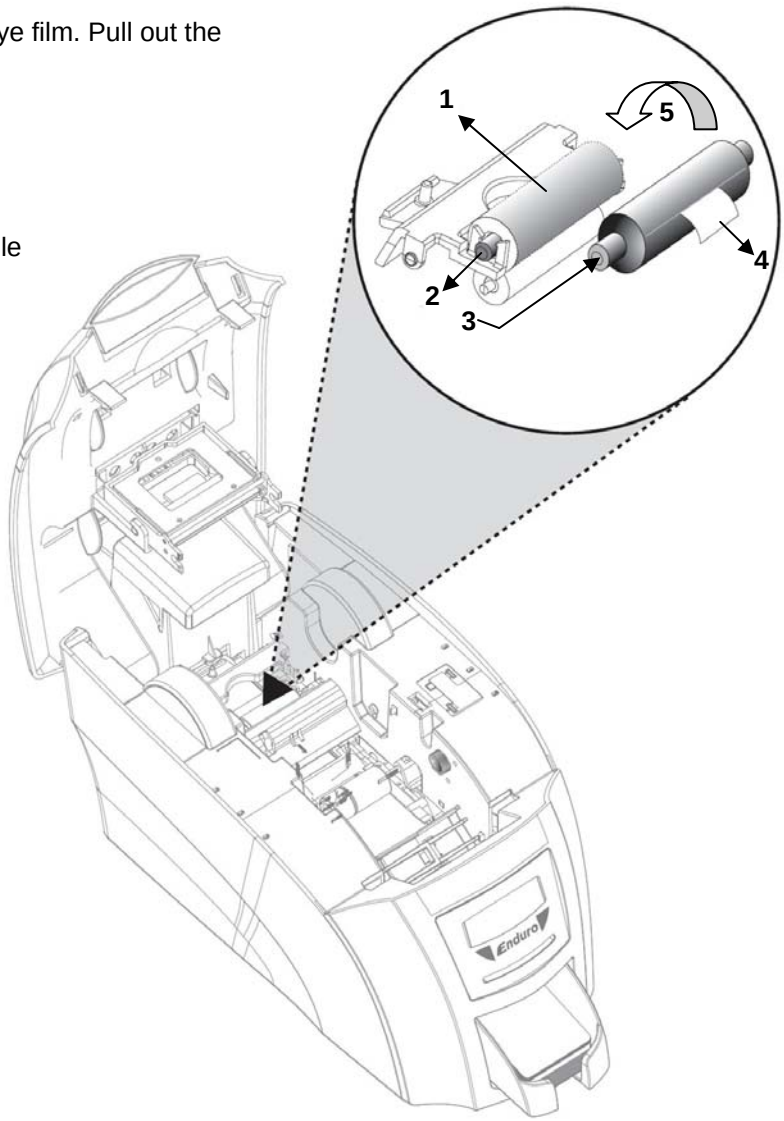


SECTION 7.4 REPLACING THE CLEANING ROLLER

Step 2 Fitting a new Cleaning Roller.

There is a cleaning cassette inside the printer which holds a cleaning roller. We recommend that this roller is replaced after every 1000 prints, or sooner if it looks dirty.
You re-use the cassette, and you replace the roller within it.

1. Open the printer lid and remove the used dye film. Pull out the used cleaning spool.
2. Remove the central roller bar
3. Slide the central roller bar through the middle of the new cleaning roller.
4. Carefully remove the protective layer to reveal the sticky surface.
5. Place the new cleaning roller into the Printer.



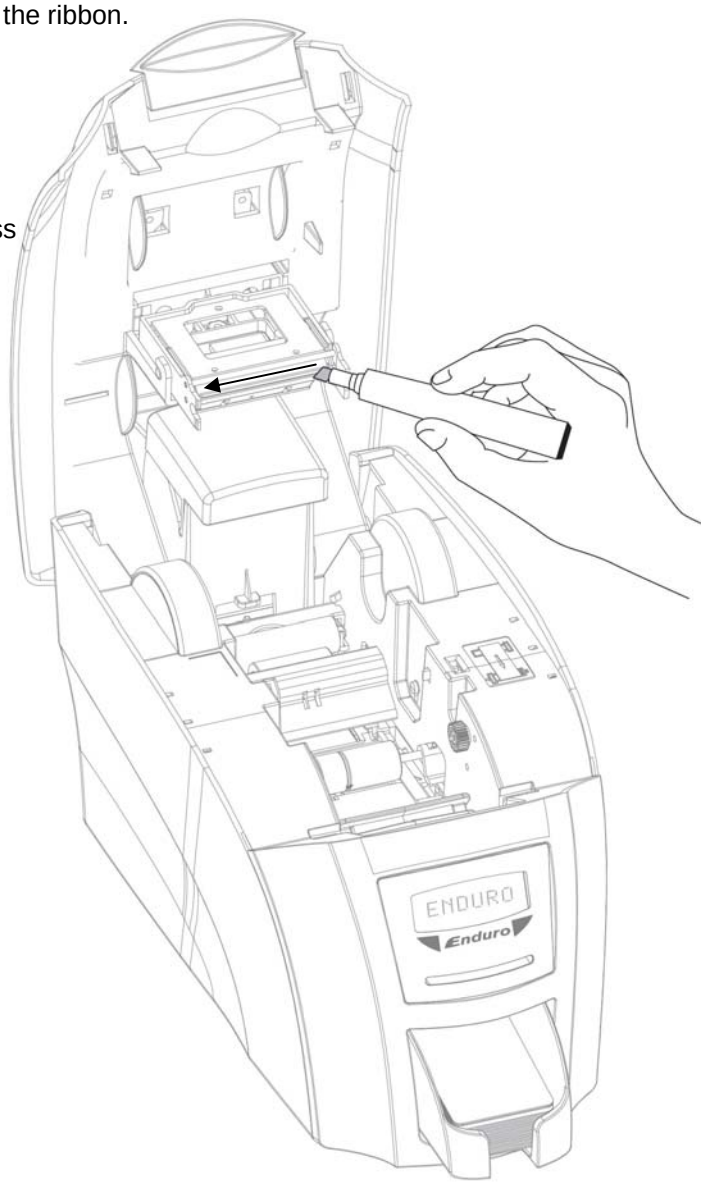
SECTION 7.5 CLEANING THE PRINT HEAD.

Step 3 Cleaning the Print Head.

The print head should be cleaned if any lines or discolorations are seen on printed cards.
It is also a good idea to clean the print head when you replace the ribbon.

1. Use the special print head cleaning pen from your Magicard printer cleaning kit. See Section 6.1 'Cleaning Supplies'.

2. Open the printer and draw the pen several times across the complete length of the print head.



SECTION 8 MAGICARD ENDURO DRIVER.

Endura and Enduro Duo use the new “UltraDriver”. This driver is for use on the following operating systems only:

Windows 2000 & Windows XP
Windows 2003 server.
Windows Vista.

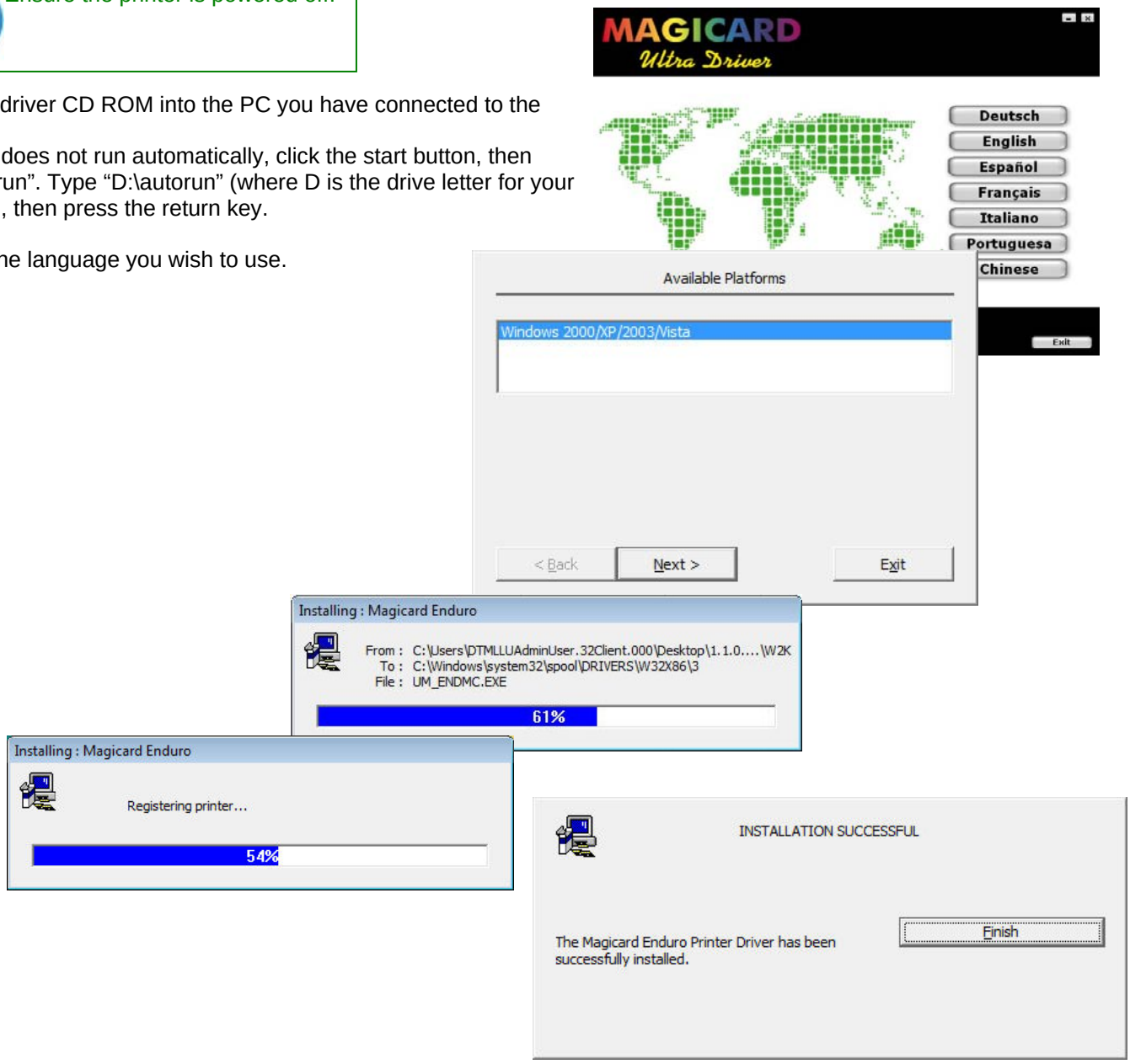
Please Note: Windows 3.11, 95, 98, ME, and NT are not supported.

SECTION 8.1 INSTALLATION INSTRUCTIONS FOR WINDOWS 2000 / XP / 2003 SERVER.

Ensure the printer is powered off.

Load the driver CD ROM into the PC you have connected to the printer.
If the CD does not run automatically, click the start button, then click on “run”. Type “D:\autorun” (where D is the drive letter for your CD drive), then press the return key.

Choose the language you wish to use.



Ensure the printer is switched on and “Ready” is shown on the Enduro printer display.
Connect the printer.

NOTE

If the computer you are configuring for a USB connection to the Magicard printer has at some time run another manufacturer’s printer (e.g. Eltron C-Series printer), a Windows file necessary for the Magicard installation could be missing.

(The symptoms of this are that the computer does not seem to detect the printer’s USB connection, and the Test Page fails to print).

Recover the file as follows:-

- Navigate to c:\windows\inf (Windows XP) or c:\winnt\inf (Windows 2000).
- Find the file named usbprint.in, and then rename it to usbprint.inf.
- Reconnect the USB cable.

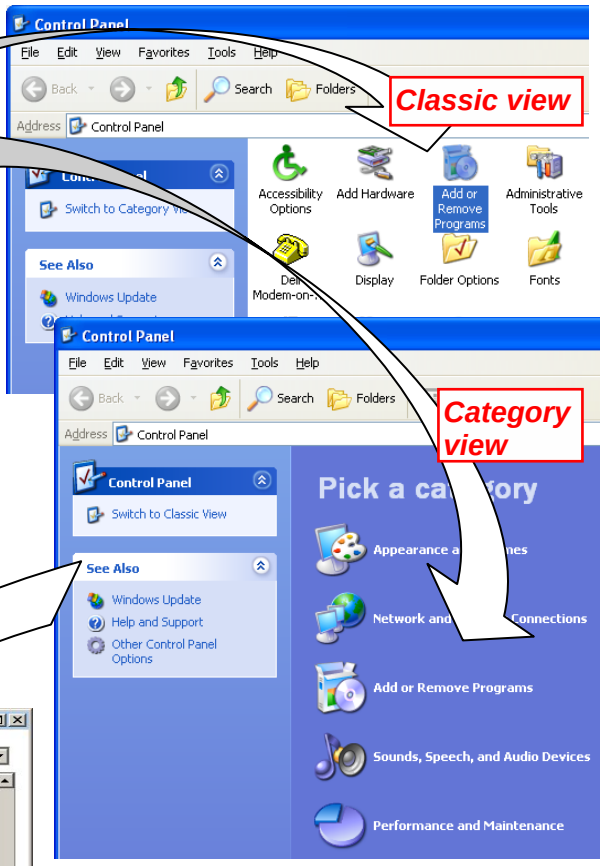
SECTION 8.2 UN-INSTALLING THE DRIVER FOR WINDOWS 2000 / XP / 2003 SERVER.

Ensure the printer is disconnected.

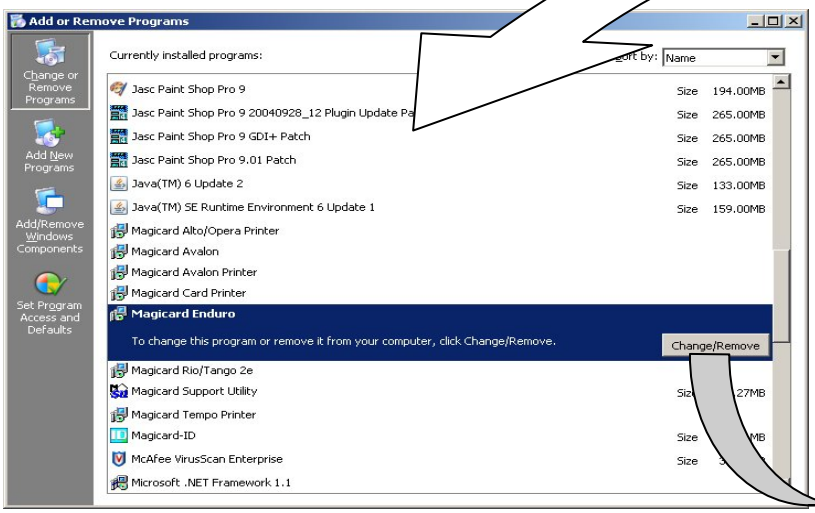
On the PC, go to “Start” >> “Control Panel”

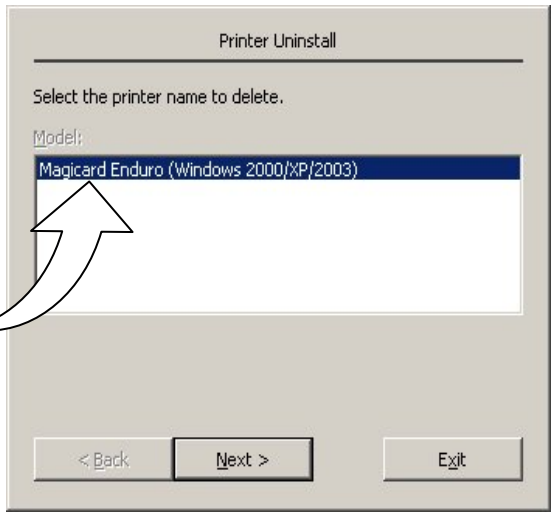
or

Then select “Add or Remove Programs”



Select the “Magicard Rio/Tango 2e” entry, and click on “Change/Remove”


Add or Remove Programs
Change or Remove Programs
Add New Programs
Add/Remove Windows Components
Set Program Access and Defaults
Currently installed programs:
Sort by: Name
Jasc Paint Shop Pro 9 Size 194.00MB
Jasc Paint Shop Pro 9 20040928_12 Plugin Update Pa Size 265.00MB
Jasc Paint Shop Pro 9 GDI+ Patch Size 265.00MB
Jasc Paint Shop Pro 9.01 Patch Size 265.00MB
Java(TM) 6 Update 2 Size 133.00MB
Java(TM) SE Runtime Environment 6 Update 1 Size 159.00MB
Magicard Alto/Opera Printer
Magicard Avalon
Magicard Avalon Printer
Magicard Card Printer
Magicard Enduro
To change this program or remove it from your computer, click Change/Remove.
Change/Remove
Magicard Rio/Tango 2e
Magicard Support Utility
Magicard Tempo Printer
Magicard-ID
McAfee VirusScan Enterprise
Microsoft .NET Framework 1.1

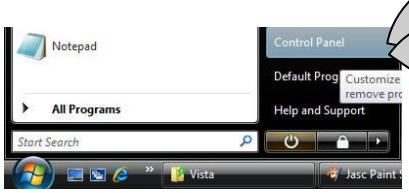


Choose the “Magicard Rio/Tango 2e” you wish to remove (there may be more than one), and click “Next”

Lastly - just follow the on-screen prompts!

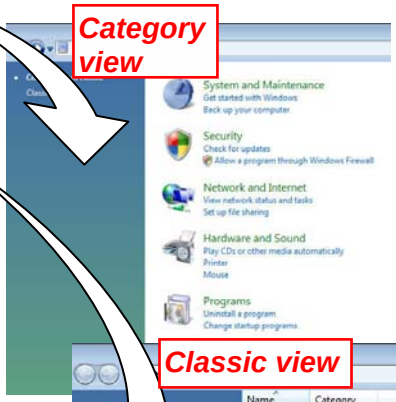
SECTION 8.3 UN-INSTALLING THE DRIVER FOR WINDOWS VISTA.

Ensure the printer is disconnected.

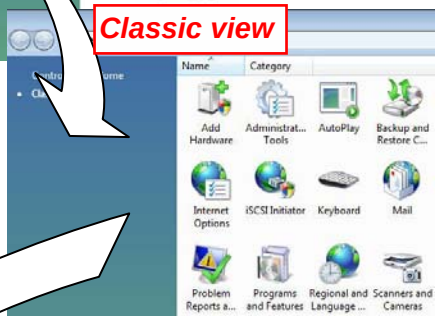


Choose the Windows Logo button followed by “Control Panel”

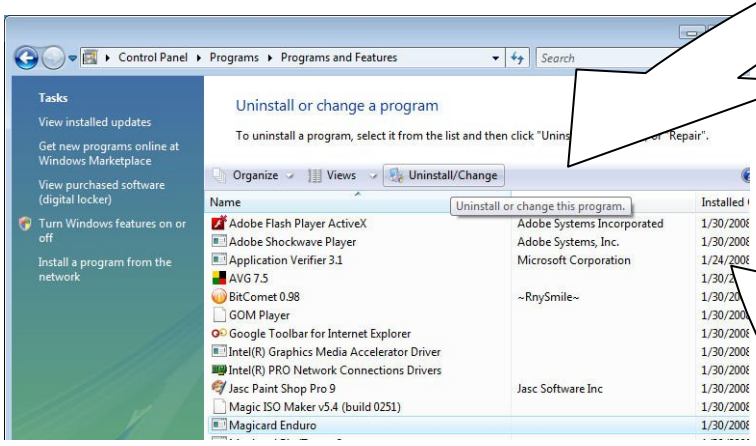
or



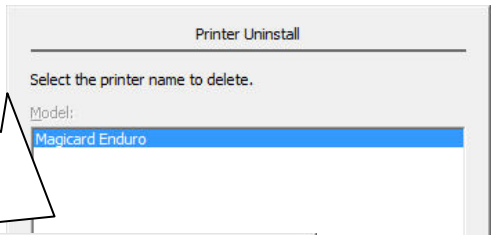
Category View choose “Uninstall a program.....”



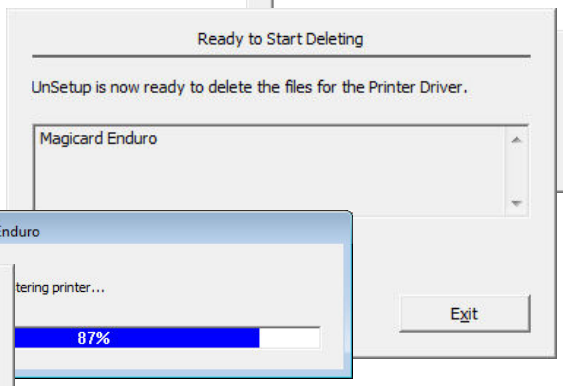
Classic View choose “Program and Features.....”

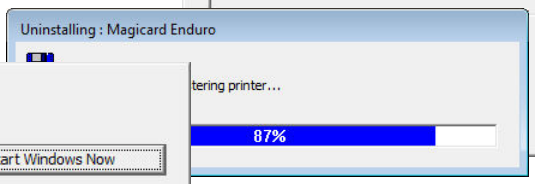


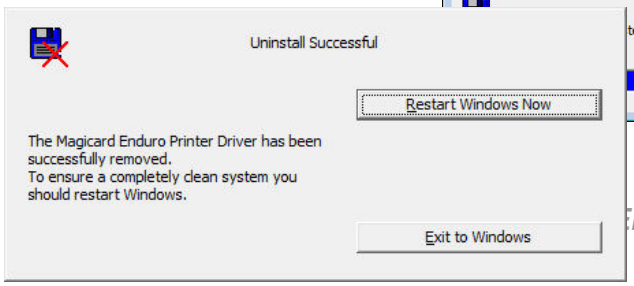
Select the Magicard Enduro Printer and the choose the “Uninstall / Change” button



Follow the instructions on the screen



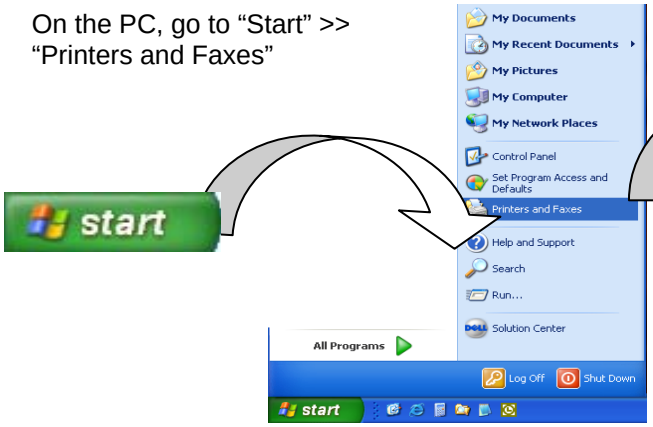



Uninstall Successful
Restart Windows Now
The Magicard Enduro Printer Driver has been successfully removed.
To ensure a completely clean system you should restart Windows.
Exit to Windows

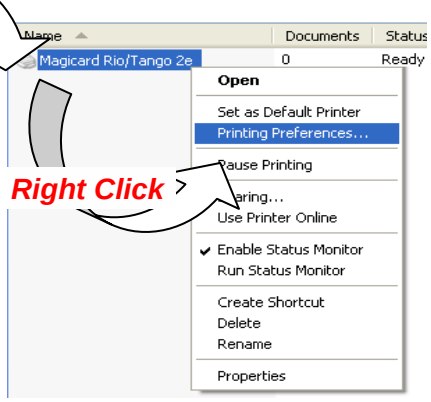
SECTION 8.4 DRIVER DESCRIPTION USING WINDOWS 2000 / XP / 2003 SERVER

To access the printer settings

On the PC, go to “Start” >> “Printers and Faxes”

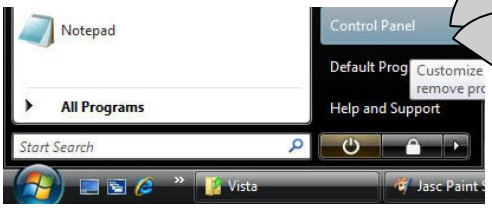


Right mouse click on the Magicard Enduro printer and select the “Printing Preferences…” option.



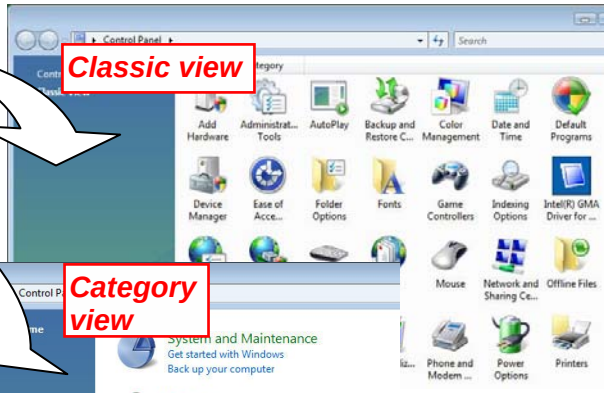
SECTION 8.5 DRIVER DESCRIPTION USING WINDOWS VISTA

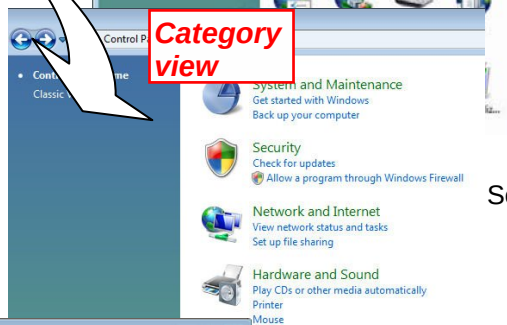
To access the printer settings



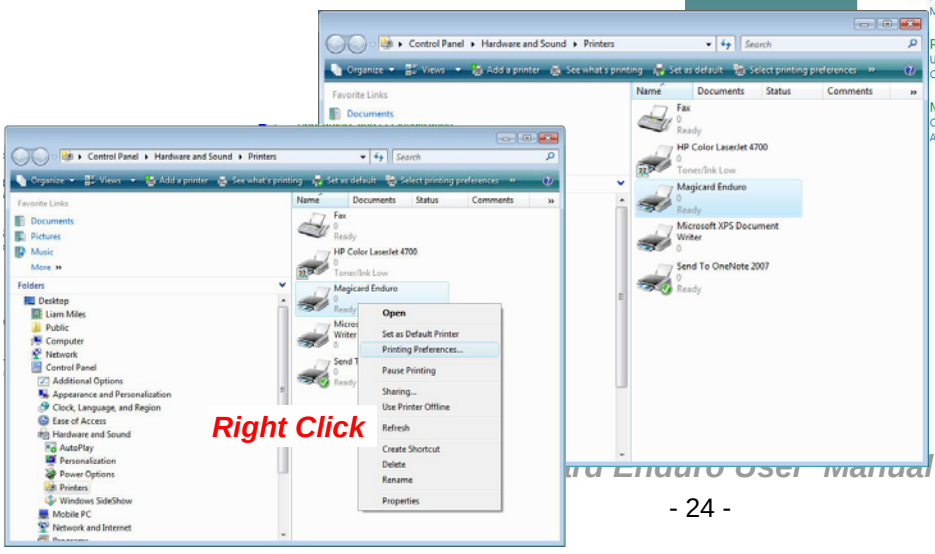
Choose the “Windows Logo” followed by “Control Panel

or





Select “Printers”

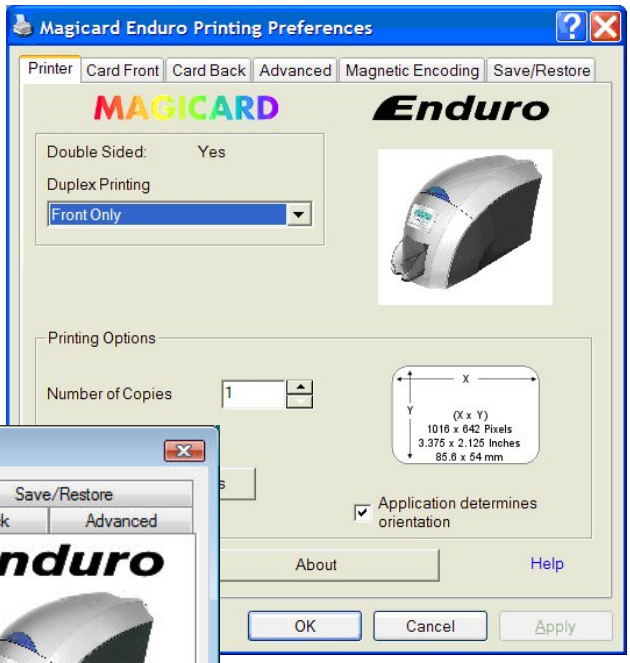


The Printer tab

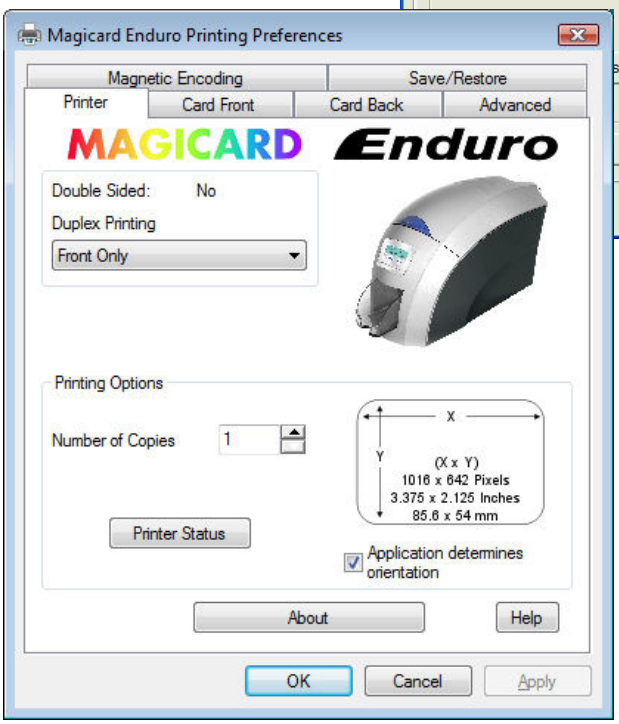
Shows which model of printer you are using by displaying a picture and the model name.

The “Printer” tab will display a diagram showing you which card dimensions are compatible with your printer.

Additional options are page size control, number of copies of a document being printed, printer status and the driver version.

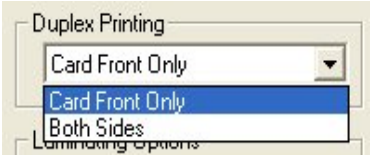


Windows 2000 / XP / 2003 Server view



Windows Vista

Duplex Printing



Use the Duplex Options for selecting single or double sided printing.

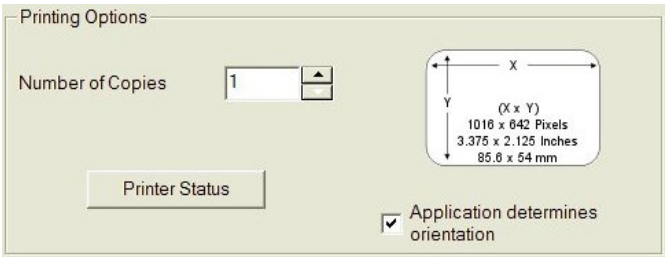
Card Front Only

The printer will only print on the front (upper) surface of the card; this option is default for Enduro printers.

Both sides: This option applies to the Enduro Duo model only.

If a 2-page document is printed, the printer will print the first page on the front of the card, flip the card over and print the second page on the back of the card thereby printing on both the front and back of the card in a single print cycle, This option is default to Enduro Duo printers and is unavailable to Enduro printers (because the Enduro printer is incapable of flipping cards).

Printing Options.



Within Printing Options there are two types of card format that can be selected, either Edge to Edge or White border, with Edge to Edge the printer will print a card design over the full surface of the card, whereas White Border will leave a small white border around all four edges of the card, select the option which is most desirable.

Number of Copies

Controls the number of times the image is printed when you send a card design to the printer, for example if you set the number of copies to '5' and send a single card design to print, the printer will produce 5 identical cards. The default value for this option is '1'.
(Tip: the orientation options can usually be found in the 'page setup' or 'badge design' sections of you software application).

Application Determines Orientation

Almost all software applications provide the user with options to determine page orientation - landscape or portrait - when printing.
If your application provides these options – leave the Application Determines Orientation box ticked.
If your application is one of the few that do not provide these options – un-tick the box and choose your desired orientation in the Card Front or Card Back.

Printer Status

Dialogue box appears that shows you the current status of the machine; cleaning cycles, number of cards printed, serial number of the machine and dye film that is fitted.

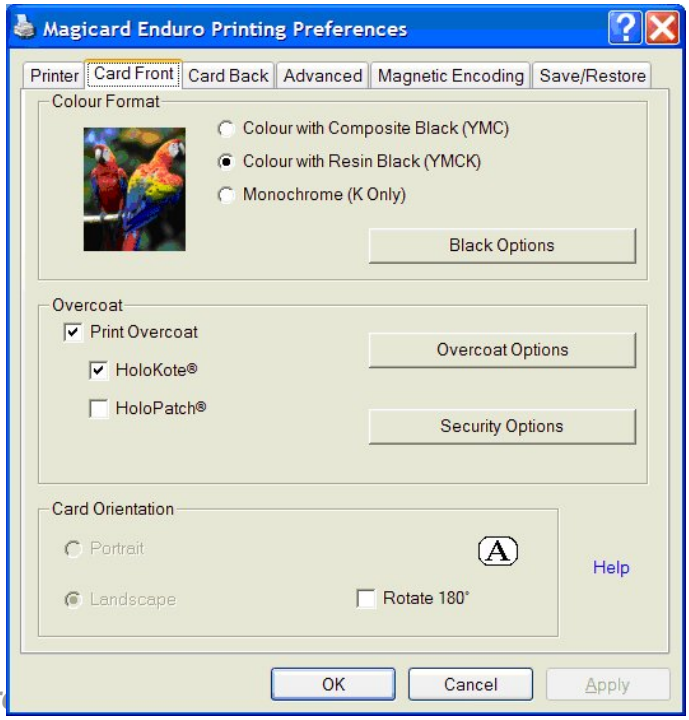
About

Information regarding the driver version currently installed

Help

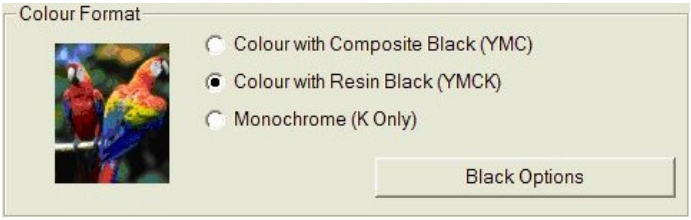
Help menu that describes the features and settings in the printer driver.

Card Front and Back Tab.



Use the Card Front and Back tabs to determine how the front and back of a printed card will be produced. There are a variety of options that will allow detailed customization of ID cards - the colour format of printed images, overcoat security options, and orientation of the printed images.

Colour Format



There is a small picture of two parrots, this shows the effects the selected colour format will have on the printed images'; if the picture of the parrots is in colour you have your printer setup to print full colour images, if the parrots are black and white then your printer is setup to print in monochrome only.

Colour with Composite Black (YMC)

When enabled you will be able to print full colour images, and any areas of your card design that are black (RGB value 0,0,0) including black text and barcodes will be printed with Composite Black.
This means that black areas are printed using a combination of the Yellow, Magenta and Cyan colours from the dye-film ribbon. Use this option if you are printing an image that contains photographs with black areas and your design does not use much black text and you want to keep your printing speeds as fast as possible.

Colour with Resin Black (YMCK)

When enabled you will be able to print full colour images, and any areas of your card design that are black (RGB value 0,0,0) will be printed either as a composite of the 3 colour panels or directly from the resin black panel.
There are a number of Black Options available for the user to select which parts of the image should be printed with the resin black panel - these options should be experimented with, as both the definition and intensity of the black can be varied. Use this option if your card design uses barcodes and/or a lot of black text. The printer will use the resin panel to produce crisp and clear barcodes and text.

Monochrome (K Only)

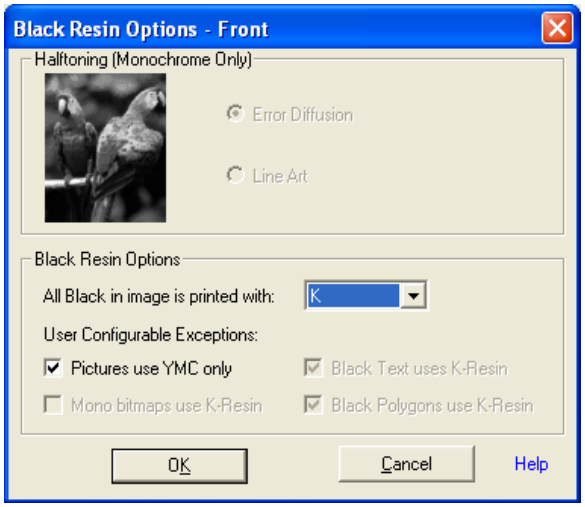
This option must be selected if a monochrome dye film (MA1000K n) is being used .

When enabled, all images will be printed in the single colour resin. Use this option if you want to photocopy your card design, or if your card design only contains black objects and text, or you are using a Resin-only dye film and you want a fast and economical print cycle.

Black Options button

Click on the Black Options button to configure how your printer handles the printing of designs that contain black (with a RGB value of 0,0,0). Advanced black options are not available if your colour format is set to Colour and Composite Black (YMC).

Black Resin Options



Halftoning (Monochrome Only)

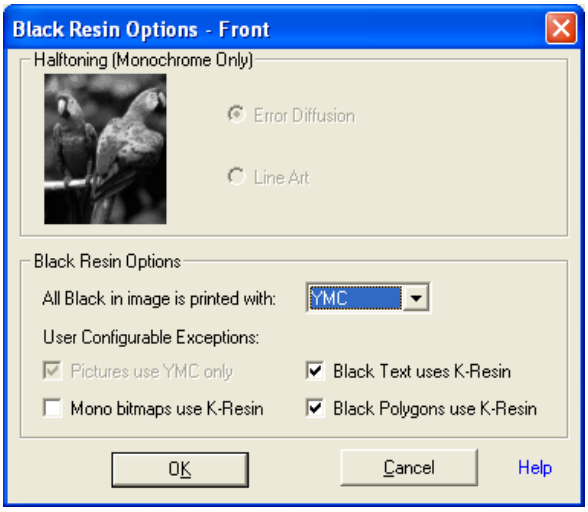
If printing with Monochrome dye-film ribbon, you first must select the Monochrome (K Only) option in the Card Front/Card Back tab; this enables these Halftoning options.
There are two Halftoning options available – they determine how the printer driver translates colour images into black and white. Select the option that works best with your card design, if your card design has two colours only (black and white only) then changing the Halftoning options will not have an effect. Error diffusion is the default and recommended option as it produces the best results.

All Black in image is printed with

This option enables the user to select which of the black parts of the image should be printed with the resin black panel. They should be experimented with, as both the definition and intensity of the black can be varied.
By default all black objects will be printed in Resin Black except areas of black in pictures.
It is not recommended disabling the 'Pictures use YMC only' option if your card design has photographs on it.

It is possible to configure whether objects such as barcodes and text are printed using Resin Black or Composite Black, to do this, select YMC in the 'All Black in image is printed with:' drop down list.

Three options will be enabled:



- Mono bitmaps use K-Resin.

Mono (monochrome) bitmaps are pictures formatted to contain only black (RGB value of 0,0,0) and white (RGB value of 255,255,255). Many ID badging applications generate barcodes as monochrome bitmaps, so when enabled, barcodes will be printed in resin black. This improves clarity and makes barcodes easier to read with conventional barcode scanners.

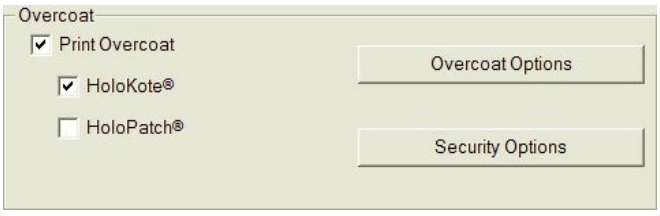
- Black Text uses K-Resin.

When enabled, all black (RGB value of 0,0,0) text in your card design will be printed in Resin Black. This improves clarity and is highly recommended if your card design uses black text or 'True Type' Barcodes. This option is enabled by default.

- Black Polygons use K-Resin.

When enabled, all black (RGB value of 0,0,0) Polygons (simple shapes such as squares, triangles and rectangles) in your card design clarity and contrast of the polygons. This option is enabled by default.

Overcoat



Print Overcoat

When enabled, a thin transparent layer of Overcoat will be applied to the card design at the end of the printing process. This overcoat protects the printed image from fading and scratching. Applying overcoat to a card design does not add any more cost to the printing process, and it is enabled by default. If it is disabled you will be warned about removing the protective layer, the only benefit of disabling Overcoat is a minor increase in print cycle speed but it is not recommended due to the loss of protection.
When Print Overcoat is enabled, the areas of the card that are protected by overcoat can be configured by clicking on the 'Overcoat Options' button.

HoloKote™

When enabled, an anti-copying watermark is printed across the entire card surface in a 4 x 6 grid (24 evenly spaced icons that are 158 x 149 pixels in size). This watermark becomes visible when the card is viewed at an angle. The patented HoloKote™ anti-forgery card protection eliminates the threat from fake IDs and is standard on all Enduro & Enduro Duo models. There is no additional cost involved in printing HoloKote cards.
There are four internal designs included

HoloPatch™

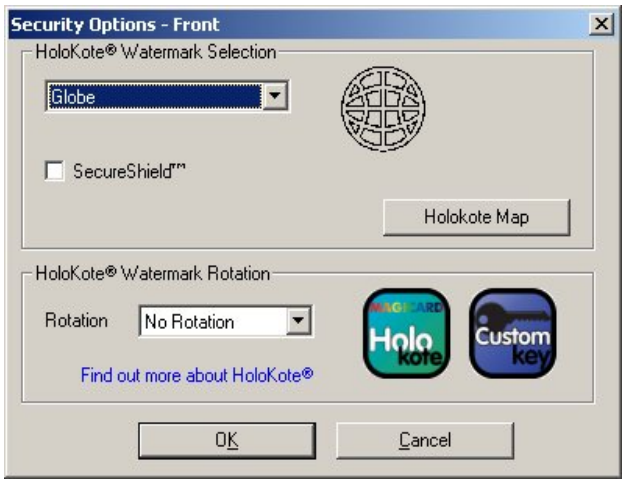
HoloPatch should only be enabled when you are printing on special HoloPatch cards - these have a blank holographic foil patch in the top right corner of the card. When enabled, one of the HoloKote s
reflective gold 'super-diffuser' patch, making the logo clearly visible under all lighting conditions. HoloKote™ with HoloPatch™ has a similar appearance to credit card hologram patches.

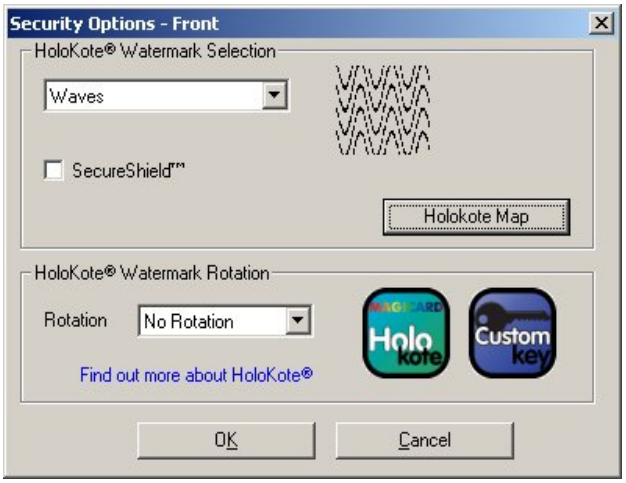
To learn more about these security features please visit the Magicard website

http://www.magicard.com/products-advantages-security.html

Security Options

There are four integral HoloKote™ designs embedded into the Driver. They are chosen from the “Security Options” Menu within the “Card Front and Card Back Tab”.





SecureShield™.

This option should only be enabled if you use a laminator in conjunction with your regular printer, if you do not use a laminator then you should leave this option disabled.

SecureShield will perform in a similar way to HoloKote in that it will print a 4 x 6 grid of graphic icons onto the card, but unlike HoloKote it will not print the overcoat between the graphics, this is done so that the HoloKote watermark is clearly visible through the laminate film and so that the laminator film on the Sicura can stick to the printed card more effectively.

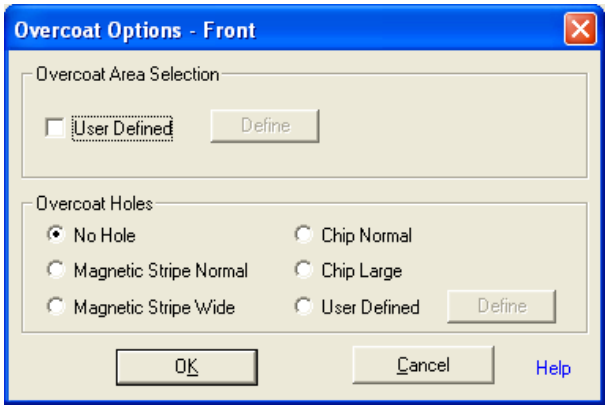
HoloKote™ Watermark Rotation.

The HoloKote™ design can be rotated when it is printed regardless of whether it is an in-built design or a custom design stored in a dongle, using the drop down list the logo can be rotated in increments of 90°. No rotation is selected by default.

Holokote Map.

HoloPatch™ works with HoloKote to produce a highly visible gold seal on the card; printed using special card stock. The HoloPatch area selection option can be changed from 1 to 24. Each number corresponds to a different position on the grey grid to the right, and causes the printer to place a HoloPatch logo at that location on the card. This should be selected to match the location of the gold HoloPatch foil square attached to the unprinted HoloPatch™ card stock.

Overcoat Options



By default the printer will print the transparent protective overcoat layer over the entire surface area of the card. The Overcoat Options window provides advanced controls for customising the size and position of the area covered, and to insert 'holes' (of no overcoat) into that overcoat area.

Overcoat Area Selection

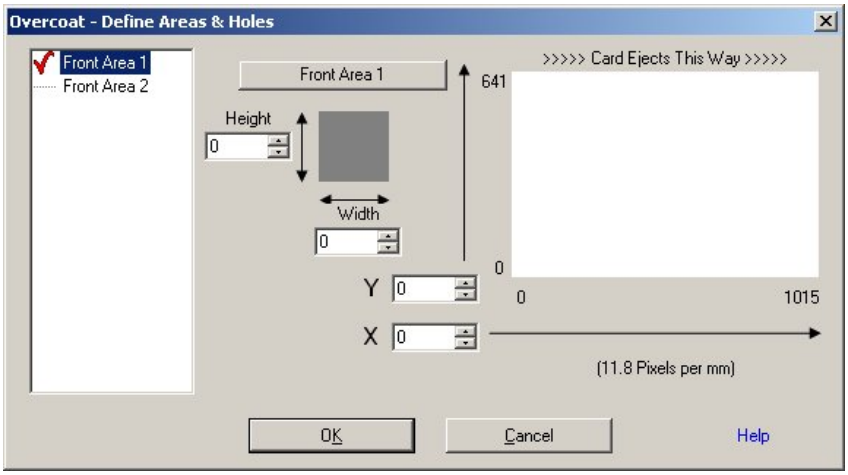
When enabled, the User Defined option gives access to the overcoat area definition window; click on the 'Define' Button to access these options.

Overcoat Holes

An overcoat hole is an area on the card that will have no overcoat printed on it.
A variety of pre-set Overcoat Holes can be selected for use with magnetic stripe and smart chip cards. (The holes will conform to the ISO standard positions).
Alternatively, the User Defined option provides advanced controls for creating customised overcoat holes, click on the 'Define' Button to access these options.

Overcoat – Define Areas & Holes

User Defined Overcoat Areas & Holes are created by entering the size and position of the coverage area or hole. It is possible to define up to 2 Overcoat Coverage Areas and up to 2 Overcoat Holes, these will appear in a preview window in the right hand side, Areas will appear as Grey polygons and Holes will appear as Black polygons.



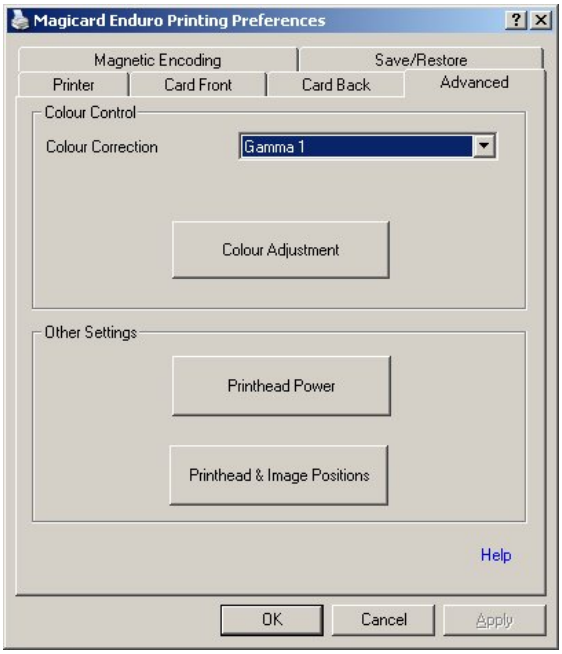
Defining a custom coverage area (or hole):
Select one of the available Profiles from the list on the left side of the window - its details will be displayed on the right side along with a preview.

Define the size (height and width) of the required coverage area (or hole) and it will be displayed as a rectangle in the preview window - use this rectangle to gauge the height and width values correctly.

Move the rectangle to the required position. Positioning is based on a grid reference using an X (left/right) and Y (up/down) axis and moving in units of pixels (Tip: there are 11.8 (approx. 12) pixels per millimetre (mm)). Use the preview as a guide while increasing/decreasing the X and Y values.

Advanced Tab

The Advanced Tab allows the customization of some of the advanced technical settings related to colour correctness and image positioning on the printed card.



Colour Control
The Colour Correction options provide software 'Gamma Curves' to correct for different characteristics of thermal printheads and dye-films. Three choices are available - None, Gamma 1, and Gamma 2. It is recommended that the setting is left on the default Gamma 1 option (which gives more accurate colour reproduction).

Colour Adjustment:
To change the colour strength of a printed card, or its brightness, saturation or contrast, click on the 'Colour Adjustment' button.

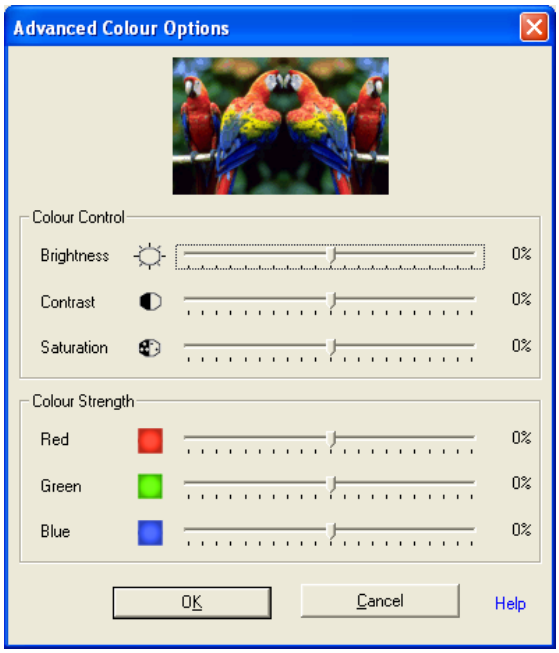
Printhead Power
Changing the Printhead power will increase or decrease the density of the colours that are printed on the card, to access the Printhead Power options click on the 'Printhead Power' button.

Printhead & Image Positions
To alter the position of the printed image on the card or add / remove white borders on a printed card design, click on the 'Printhead & Image Positions' button

Advanced Colour Options.

The Advanced Colour Options provide controls for fine tuning the colour output of the printer. The card design can de darkened, lightened, made brighter or appear faded, even specific colour levels can be adjusted by changing the position of the colour strength sliders.
The preview picture at the top of the window will show the results of any adjustments.

All colours in an image design are a mixture of red, green and blue (RGB). So any change in the strength of one of these 3 colours (RGB) will affect every colour that is composed using the changed colour, so the results may not be as expected; for this reason it is recommended that colour control and colour strength sliders remain at their default settings.



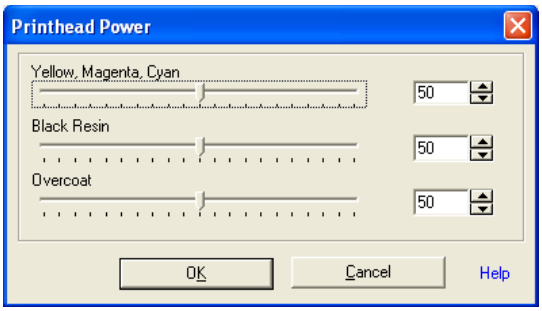
Print Head Power

These options provide control over the degree of printhead 'heating' power applied to the cards and dye-film ribbon during the printing process.

Yellow, Magenta, Cyan (YMC).
An increase or decrease in the YMC Power will result in an increase or decrease in the colour density – images will be darkened or lightened.

Black Resin.
An increase or decrease in the Black Resin Power will result in an increase or decrease in the 'boldness' of black text and barcodes.

Overcoat.
An increase or decrease in the Overcoat Power will result in an increase or decrease in the visibility of the HoloKote anti-forgery images.



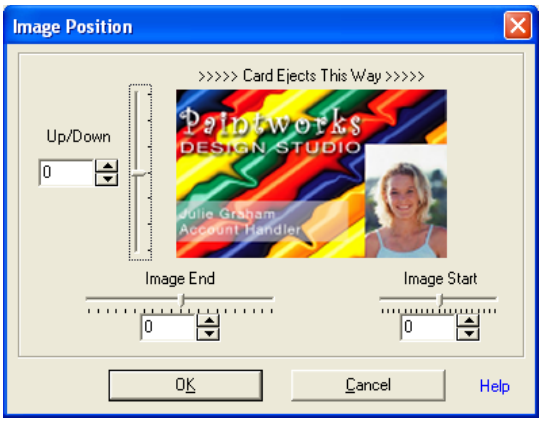
Very low Overcoat Power settings can cause side effects such as card images fading over time, and also negate the Holokote® anti-forgery card protection system.

Very high settings of any of these Print Head Power sliders can cause side effects such as incorrect or distorted colours, breaking of the dye-film ribbon; and even damage to the thermal print head.

In the event that the dye-film ribbon breaks due to over-heating, it can be repaired using Adhesive Tape; attach the broken section together and then wind up the black take-up spool by hand for roughly two full turns. Then, before printing again, turn the printer off and back on again and reduce the Power settings so the dye film does not break again.

Image Position

The Image Position options enable the user to make small adjustments to the position of the printed image on the plastic cards - this can be useful for eliminating unwanted white borders. All adjustments are with reference to the card viewed in landscape.



Up/Down
Slider moved upwards: the image will move upwards on the card.
Slider moved downwards: the image will move downwards.
The adjustment is calibrated to: 12 steps = 1mm (approx).

Image End
Slider moved left: the End of the Image will move left (closer to the end of the card).
Slider moved right: the End of the Image will move right (away from the end of the card).
The adjustment is calibrated to: 12 steps =1mm (approx).

The Image Start is unaffected.

Moving the Image End slider too far left can result in the image being printed beyond the end of the card – this will cut the dye-film ribbon.

Image Start
Slider moved left: the Start of the Image will move left (away from the start of the card).
Slider moved right: the Start of the Image will move right (closer to the start of the card).
The adjustment is calibrated to: 10 steps = 0.1mm (approx).

Any movement of the Image Start position will have a corresponding effect on the Image End position. Moving the Image Start slider too far right can result in the image being printed beyond the start of the card – this will cut the dye-film ribbon.

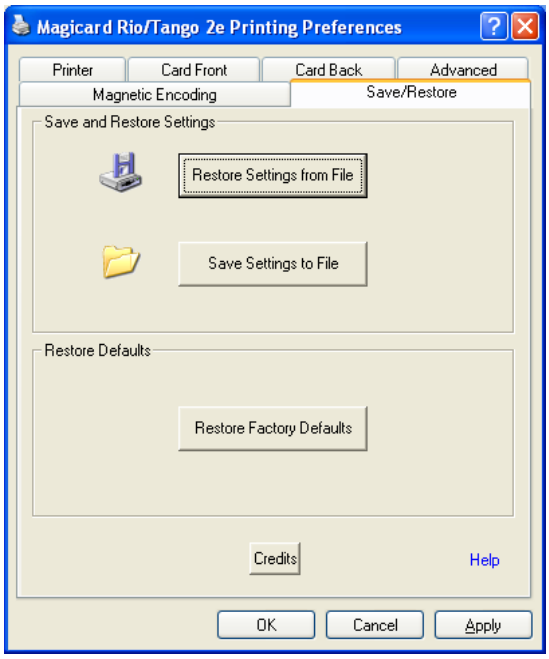
In the event that the dye-film ribbon breaks due to printing beyond the edges of the card, it can be repaired using Adhesive Tape; attach the broken ends together and then wind up the black take-up spool by hand for roughly two full turns. Then, before printing again, turn the printer off and back on again and change the Image Position settings so the dye film does not break again.

The Save & Restore Tab

The Save & Restore Tab is used to save your driver settings to a file, restore the settings from a file, or restore the settings to the original defaults.

If you change your driver settings it is recommended that you save these settings to a file, doing so will allow you to back-up and restore your driver settings:

- In case your driver is updated
- In case your driver settings are changed
- In case your driver is re-installed
- Migrating your driver settings to other PC systems
- Create driver settings profiles for your card designs



The Save & Restore Settings:

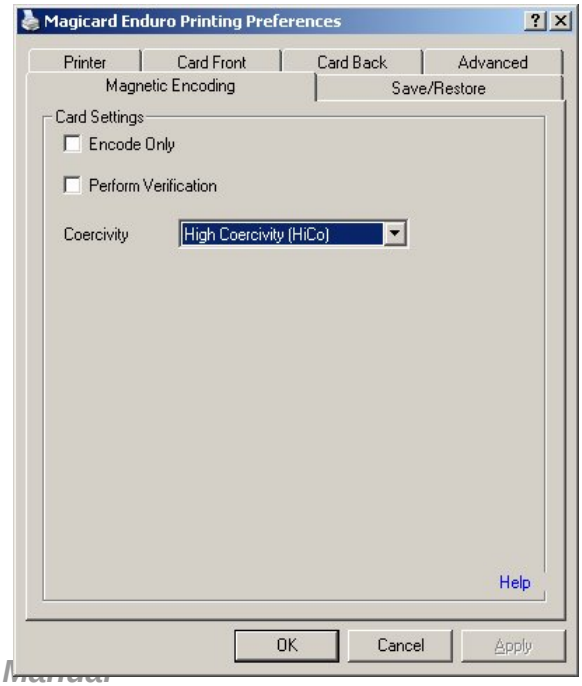
Restore Settings from File
This button is used to load 'Settings Files' (files with an .MDS extension). These contain driver settings that have been saved using the Save Settings to File button.

Save Settings to File
This button is used to save the driver settings to a file with an .MDS extension. This allows for the backup of driver settings in case the driver is uninstalled or updated, and has a variety of other possible advantages such as sharing driver settings between computers and creating driver profiles for different card designs.

Restore Defaults:
Restore Factory Defaults
This button is used to reset all the settings in the driver to their original default settings. Be sure to back up your driver settings if you want to keep a record of them, this can be done by using the Save Settings to File button.

The driver will ask for confirmation before going ahead with the restore.

The Magnetic Encoding Tab



Card Settings

Encode Only
This option will enable the user to carry out magnetic encoding from a badging application without printing the associated image; this is useful for encoding cards that are already in use. No dye film will be used.

Perform Verification
When enabled, the printer will self-check (verify) all magnetic encoded cards prior to printing the image - to ensure that encoding has been successful.
Any unsuccessful cards will be re-encoded up to 3 times. If still unsuccessful, the card will be rejected and the printer will give an error message.
Performing verification will increase the time to print but it will improve encoding reliability. In the interest of speed this option is turned off by default.

Coercivity
This is a measurement of a magnetic materials resistance to being magnetised. Set this option to match the Coercivity of your cards, either Low Coercivity (LoCo) or High Coercivity (HiCo) cards can be encoded. The coercivity your cards should be clearly labelled on the cards' packaging.